

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-25 (Canceled)

26. (Previously Presented) A process for filtering water containing solids with membranes in a tank comprising the steps of:

a) filling the tank with a feed water to be filtered to immerse the membranes;

b) creating a transmembrane pressure between a permeate side and a retentate side of the membranes, the retentate side of the membranes being in contact with the water in the tank at ambient pressure, the permeate side being subject to a negative pressure relative to the pressure of the water in the tank fluidly connected to a filtered permeate outlet, to generate a filtered permeate at the permeate outlet and a retentate in the tank;

c) aerating the membranes to dislodge solids from the membranes;

d) backwashing the membranes; and,

e) draining the tank of the retentate;

wherein

i) the steps above are performed in repeated cycles; and,

ii) the steps of backwashing the membranes and draining the tank in a cycle may be performed either before the other or partially or substantially simultaneously; and,

f) wetting the membranes at least once per week with a cleaning chemical having a selected concentration for a selected duration after performing step (b) in a first cycle and after or while performing step (e) in the first cycle, without returning to step (b) in the first cycle and before starting a subsequent cycle.

27. (Previously Presented) The process of claim 26 wherein the repeated cycles of part (i) of claim 26 are repeated at least once a day and step (f) is repeated between once a day and once per cycle of part (i) of claim 26.

28. (Previously Presented) The process of claim 26 further comprising the steps of performing recovery cleanings from time to time to increase the permeability of the membranes wherein the steps of claim 26 are performed between the recovery cleanings and reduce the rate of a decline in permeability of the membranes between the recovery cleanings.

29. (Previously Presented) The process of claim 26 wherein the sum of the products of the selected concentration and selected duration of part (f) of claim 26 is between 2,000 min•mg/l and 20,000 min•mg/l per week over a period of at least 1 month when NaOCl is the cleaning chemical or an equivalent product of concentration and time of another cleaning chemical.

30. (Previously Presented) The process of claim 29 wherein the sum of the products of the selected concentration and selected duration of part (f) of claim 26 is between 5,000 min•mg/l and 10,000 min•mg/l per week over a period of at least one month when NaOCl is the cleaning chemical or an equivalent product of concentration and time of another cleaning chemical.

31. (Previously Presented) The process of claim 28 wherein the recovery cleanings are performed at least 1 month apart from each other.

32. (Previously Presented) The process of claim 28 wherein the filtered permeate generated at the permeate outlet is intended for use as drinking water and the cleaning chemical comprises an oxidant.

33. (Previously Presented) The method of claim 29 wherein the steps of part (f) of claim 26 are performed at regular intervals and each have about the same product of selected concentration and selected duration.

34. (Previously Presented) The method of claim 26 wherein the membranes are backwashed with permeate in the first cycle after step (f) of claim 26 in the first cycle and before starting the subsequent cycle.

35. (Previously Presented) The method of claim 26 wherein step (f) of claim 26 further comprises the steps of flowing water to the permeate side of the membranes and mixing a cleaning chemical into the flowing water.

36. (Previously Presented) The method of claim 26 wherein the membranes are hollow fibre porous membranes.